



July 12, 2012

Mr. Mark Nations
The Doe Run Company
P.O. Box 1633
Desloge, Missouri 63601

Re: Ambient Air Monitoring Report – Rivermines Site

Dear Mr. Nations:

Please find attached the April 2012 “*Ambient Air Monitoring Report*” for The Doe Run Company at the Rivermines Sites, located near Park Hills, Missouri.

This report will include the following:

- **Glossary of Terms** – Listing of the abbreviations used for each parameter and unit.
- **Ambient Air Quality Standards** – Lists the maximum allowable concentrations for the measured parameters.
- **TSP, Lead & PM₁₀ Particulate Summaries** – Includes the averages of each monitored parameter, which relates to the federal standards.
- **Particulate and Lead Analysis Spreadsheets.**
- **Lab Results (lead & cadmium)** – Lab reports from Inovatia Laboratories, LLC.
- **Meteorological Data Printouts** – This supplies printouts of each parameter.

Barr Engineering Company offers this report as an independent laboratory. This includes the weighing of filters, obtaining lead and cadmium analysis, compiling the data, and preparing the report. No interpretation of the data or analysis of the results is implied or intended. Should you have any questions regarding this report, please call.

Respectfully,

A handwritten signature in black ink that reads "Richard J. Campbell".

Richard J. Campbell, PE
Chemical Engineer
Senior Environmental Consultant

c: Kathy Rangen
Jason Gunter
Ty Morris



Ambient Air Monitoring Report

***Rivermines
Park Hills, Missouri***

***Prepared for
The Doe Run Company***

April 2012



Ambient Air Monitoring Report

***Rivermines
Park Hills, Missouri***

***Prepared for
The Doe Run Company***

April 2012



***1001 Diamond Ridge Suite 1100
Jefferson City, MO 65109
Phone: (573) 638-5000
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GLOSSARY OF TERMS

$\mu\text{g}/\text{m}^3$	Micrograms per Cubic Meter
mph	Miles per Hour
Wind Direction	Degrees from True North
TSP	Total Suspended Particulate
PM ₁₀	Particulate Matter - 10 Microns or Less
mmHg	Millimeters of Mercury

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

PM ₁₀ – Particulate Matter	24-Hour*	Annual Maximum	150 $\mu\text{g}/\text{m}^3$
Lead	Calendar Quarter	Arithmetic Mean	1.5 $\mu\text{g}/\text{m}^3$
Lead	Rolling 3-Month Average	Arithmetic Mean	0.15 $\mu\text{g}/\text{m}^3$

TSP (Total Suspended Particulate) – There are no Federal Standards that apply solely for TSP.

*This standard must be exceeded more than once a year to constitute a violation.



TSP and Lead Concentration Summary

Rivermines
Park Hills, Missouri

2012

Date	TSP Big River #4 ($\mu\text{g}/\text{m}^3$)	TSP South #1 ($\mu\text{g}/\text{m}^3$)	TSP North #2 ($\mu\text{g}/\text{m}^3$)	TSP East #3 ($\mu\text{g}/\text{m}^3$)	LEAD Big River #4 ($\mu\text{g}/\text{m}^3$)	LEAD South #1 ($\mu\text{g}/\text{m}^3$)	LEAD North #2 ($\mu\text{g}/\text{m}^3$)	LEAD East #3 ($\mu\text{g}/\text{m}^3$)
4/2/12	78	57	47	63	0.040	0.014	0.012	0.017
4/3/12	31	30	33	31	0.007	0.007	0.020	0.007
4/4/12	33	34	32	32	0.012	0.025	0.008	0.010
4/5/12	35	38	30	24	0.010	0.080	0.000	0.006
4/6/12	22	24	21	21	0.006	0.009	0.000	0.000
4/9/12	36	59	28	23	0.033	0.282	0.000	0.011
4/10/12	37	86	26	33	0.038	0.284	0.000	0.039
4/11/12	44	54	34	33	0.029	0.142	0.009	0.016
4/12/12	51	37	45	43	0.008	0.008	0.000	0.013
4/13/12	38	40	40	44	0.000	0.000	0.000	0.000
4/16/12	24	48	16	23	0.008	0.176	0.000	0.048
4/17/12	18	18	12	14	0.010	0.019	0.000	0.006
4/18/12	22	25	14	17	0.009	0.019	0.000	0.008
4/19/12	37	41	32	35	0.020	0.008	0.017	0.009
4/20/12	21	15	14	13	0.000	0.000	0.000	0.000
4/23/12	28	64	20	20	0.024	0.174	0.012	0.018
4/24/12	38	36	32	41	0.017	0.035	0.074	0.046
4/25/12	52	63	41	44	0.016	0.110	0.017	0.009
4/26/12	48	73	45	95	0.020	0.345	0.000	0.041
4/27/12	35	31	33	33	0.012	0.011	0.000	0.017
4/30/12	24	20	19	19	0.012	0.006	0.020	0.011
Monthly Average	36	43	29	33	0.016	0.083	0.009	0.016
Mar 2012					0.016	0.021	0.039	0.017
Feb 2012					0.017	0.024	0.012	0.025
Rolling 3-month Average					0.02	0.04	0.02	0.02
					3-month Average Lead NAAQS $\mu\text{g}/\text{m}^3$ 0.15			

Please see the particulate analysis sheets for explanations of missing or invalid data.

Note: A summary of the Big River #4 sampler data is also included, because it was part of the QA plan.



Particulate Summary

Rivermines
Park Hills, Missouri

2012

Date	PM ₁₀ Big River #4 ($\mu\text{g}/\text{m}^3$)	PM ₁₀ South #1 ($\mu\text{g}/\text{m}^3$)	PM ₁₀ North #2 ($\mu\text{g}/\text{m}^3$)	PM ₁₀ East #3 ($\mu\text{g}/\text{m}^3$)	PM ₁₀ NAAQS ($\mu\text{g}/\text{m}^3$)
3-Apr	21	17	14	18	150
6-Apr	12	14	11	11	150
9-Apr	19	42	13	16	150
12-Apr	20	18	15	17	150
15-Apr	40	34	33	34	150
18-Apr	11	13	9	10	150
21-Apr	INVALID	9	10	8	150
24-Apr	14	13	11	14	150
27-Apr	25	39	20	30	150
30-Apr	15	14	14	14	150
Monthly Average	20	21	15	17	

Please see the particulate analysis sheets for explanations of missing or invalid data.

Note: A summary of the Big River #4 sampler data is also included, because it was part of the QA plan.

Particulate and Lead Analysis



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P4557

Big River Site #4- Primary

Sample Date 2012	Filter ID	TSP Filter Net Wt. g	Lead Total Wt. µg	T _{av} C	P _{av} mmHg	P _f mmHg	Ratio P _f /P _{av}	Q _s m ³ /min	Q _{std} m ³ /min	Elapsed Time hr	Sample Volume V _{std} m ³	Mass Concentrations TSP µg/m ³	Lead µg/m ³
4/2/2012	8552225	0.1350	70	24	738.0	36.1	0.951	1.244	1.210	23.72	1723	78	0.040
4/3/2012	8552216	0.0526	11	20	740.5	35.6	0.952	1.238	1.226	23.06	1696	31	0.007
4/4/2012	8552206	0.0568	21	17	738.4	35.1	0.952	1.232	1.231	23.28	1719	33	0.012
4/5/2012	8552997	0.0626	17	11	740.6	34.5	0.953	1.223	1.248	23.59	1767	35	0.010
4/6/2012	8552988	0.0391	11	9	748.1	34.2	0.954	1.219	1.268	23.65	1800	22	0.006
4/9/2012	8552977	0.0627	58	13	747.6	34.7	0.954	1.227	1.256	23.25	1752	36	0.033
4/10/2012	8552968	0.0663	68	11	747.9	34.4	0.954	1.222	1.263	23.54	1784	37	0.038
4/11/2012	8552959	0.0780	52	7	750.5	34.0	0.955	1.216	1.277	23.38	1791	44	0.029
4/12/2012	8552949	0.0926	14	10	749.3	34.3	0.954	1.221	1.268	23.68	1801	51	0.008
4/13/2012	8552940	0.0686	< 10	12	746.3	34.5	0.954	1.225	1.257	23.70	1788	38	0.000
4/16/2012	8552930	0.0428	13	14	745.5	34.8	0.953	1.229	1.250	23.65	1773	24	0.008
4/17/2012	8552922	0.0323	18	13	751.5	34.7	0.954	1.227	1.264	23.63	1792	18	0.010
4/18/2012	8552912	0.0383	15	15	747.7	34.9	0.953	1.230	1.251	23.55	1768	22	0.009
4/19/2012	8552903	0.0642	34	17	742.4	35.2	0.953	1.234	1.236	23.70	1757	37	0.020
4/20/2012	8593293	0.0366	< 10	12	741.6	34.5	0.953	1.224	1.249	23.69	1775	21	0.000
4/23/2012	8593283	0.0496	43	9	745.9	34.2	0.954	1.220	1.263	23.64	1791	28	0.024
4/24/2012	8593274	0.0664	30	15	739.7	35.0	0.953	1.230	1.236	23.65	1754	38	0.017
4/25/2012	8593265	0.0908	28	19	735.7	35.5	0.952	1.236	1.219	23.65	1730	52	0.016
4/26/2012	8593255	0.0822	34	22	741.0	35.8	0.952	1.240	1.222	23.31	1708	48	0.020
4/27/2012	8593246	0.0621	21	12	744.8	34.6	0.954	1.225	1.254	23.74	1786	35	0.012
4/30/2012	8593237	0.0417	21	20	743.6	35.5	0.952	1.238	1.232	23.62	1746	24	0.012

Data Captured	TSP	Lead
Valid Samples:	21	21
Scheduled Samples:	21	21
Percent Data Captured:	100%	100%

Monthly Average:	36	0.016
Standard Deviation:	14	0.012
Maximum:	78	0.040
Minimum:	18	0.000

NOTES

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celcius

P_{av} = average station pressure in millimeters of mercury

P_f = (((Temp in °Kelvin * Temp Slope) + Temp Int.)) * 1.868

P_f = ((Temp in °Kelvin * 0.0664) + (-0.4213)) * 1.868

P_f/P_{av} = pressure ratio of P_f and P_{av} = 1 - P_f/P_{av}

Q_s = look up table volumetric flow rate

Q_{std} = total sample volumetric flow rate corrected to standard conditions

V_{std} = total sample volume corrected to standard conditions

TSP = mass concentration in µg/std m³

Lead = mass concentration in µg/std m³



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P2940

Elvins Rivermines Site #1 by Office

Sample Date 2012	Filter ID	TSP Filter Net Wt. g	Lead Total Wt. µg	T _{av} C	P _{av} mmHg	P _i mmHg	Ratio P _i /P _{av}	Q _s m ³ /min	Q _{std} m ³ /min	Elapsed Time hr	Sample Volume V _{std} m ³	Mass Concentrations TSP µg/m ³	Lead µg/m ³
4/2/2012	8552222	0.0990	24	24	738.0	36.1	0.951	1.250	1.216	23.65	1726	57	0.014
4/3/2012	8552213	0.0531	12	20	740.5	35.6	0.952	1.243	1.231	23.62	1745	30	0.007
4/4/2012	8552203	0.0592	44	17	738.4	35.1	0.952	1.237	1.237	23.81	1767	34	0.025
4/5/2012	8552994	0.0689	143	11	740.6	34.5	0.953	1.229	1.254	23.85	1794	38	0.080
4/6/2012	8552985	0.0430	16	9	748.1	34.2	0.954	1.225	1.274	23.82	1821	24	0.009
4/9/2012	8552974	0.1046	503	13	747.6	34.7	0.954	1.232	1.262	23.61	1787	59	0.282
4/10/2012	8552965	0.1565	514	11	747.9	34.4	0.954	1.228	1.269	23.81	1813	86	0.284
4/11/2012	8552956	0.0999	261	7	750.5	34.0	0.955	1.222	1.283	23.84	1836	54	0.142
4/12/2012	8552946	0.0666	15	10	749.3	34.3	0.954	1.227	1.273	23.72	1812	37	0.008
4/13/2012	8552937	0.0730	< 10	12	746.3	34.5	0.954	1.230	1.263	23.90	1811	40	0.000
4/16/2012	8552927	0.0866	317	14	745.5	34.8	0.953	1.234	1.255	23.86	1797	48	0.176
4/17/2012	8552919	0.0330	35	13	751.5	34.7	0.954	1.232	1.269	23.87	1818	18	0.019
4/18/2012	8552909	0.0449	34	15	747.7	34.9	0.953	1.236	1.257	23.63	1782	25	0.019
4/19/2012	8593300	0.0730	14	17	742.4	35.2	0.953	1.239	1.241	23.77	1770	41	0.008
4/20/2012	8593290	0.0263	< 10	12	741.6	34.5	0.953	1.229	1.255	23.91	1800	15	0.000
4/23/2012	8593280	0.1164	316	9	745.9	34.2	0.954	1.226	1.269	23.83	1814	64	0.174
4/24/2012	8593271	0.0633	62	15	739.7	35.0	0.953	1.236	1.242	23.86	1778	36	0.035
4/25/2012	8593262	0.1107	193	19	735.7	35.5	0.952	1.242	1.224	23.83	1750	63	0.110
4/26/2012	8593252	0.1271	603	22	741.0	35.8	0.952	1.246	1.227	23.71	1746	73	0.345
4/27/2012	8593243	0.0553	20	12	744.8	34.6	0.954	1.230	1.260	23.86	1803	31	0.011
4/30/2012	8593234	0.0351	10	20	743.6	35.5	0.952	1.243	1.237	23.85	1770	20	0.006

Data Captured	TSP	Lead
Valid Samples:	21	21
Scheduled Samples:	21	21
Percent Data Captured:	100%	100%

Monthly Average:	43	0.083
Standard Deviation:	19	0.109
Maximum:	86	0.345
Minimum:	15	0.000

NOTES

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celsius
 P_{av} = average station pressure in millimeters of mercury
 P_i = ((Temp in °Kelvin * Temp Slope) + Temp Int.) * 1.868
 P_i = ((Temp in °Kelvin * 0.0664) + (-0.4213)) * 1.868
 P_i/P_{av} = pressure ratio of P_i and P_{av} = 1 - P_i/P_{av}
 Q_s = look up table volumetric flow rate
 Q_{std} = total sample volumetric flow rate corrected to standard conditions
 V_{std} = total sample volume corrected to standard conditions
 TSP = mass concentration in µg/std m³
 Lead = mass concentration in µg/std m³



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P2941

Elvins Rivermines Site #2 Wood & Barton

Sample Date 2012	Filter ID	TSP Filter Net WL g	Lead Total Wt. µg	T _{av} C	P _{av} mmHg	P _i mmHg	Ratio P _i /P _a	Q _a m ³ /min	Q _{std} m ³ /min	Elapsed Time hr	Sample Volume V _{std} m ³	Mass Concentrations TSP µg/m ³	Lead µg/m ³
4/2/2012	8552224	0.0797	20	24	738.0	36.1	0.951	1.233	1.200	23.51	1692	47	0.012
4/3/2012	8552215	0.0566	35	20	740.5	35.6	0.952	1.226	1.215	23.67	1725	33	0.020
4/4/2012	8552205	0.0548	14	17	738.4	35.1	0.952	1.221	1.220	23.66	1732	32	0.008
4/5/2012	8552996	0.0530	< 10	11	740.6	34.5	0.953	1.212	1.237	23.72	1760	30	0.000
4/6/2012	8552987	0.0382	< 10	9	748.1	34.2	0.954	1.209	1.257	23.66	1785	21	0.000
4/9/2012	8552976	0.0484	< 10	13	747.6	34.7	0.954	1.216	1.245	23.44	1751	28	0.000
4/10/2012	8552967	0.0464	< 10	11	747.9	34.4	0.954	1.211	1.252	23.72	1782	26	0.000
4/11/2012	8552958	0.0622	16	7	750.5	34.0	0.955	1.206	1.266	23.83	1810	34	0.009
4/12/2012	8552948	0.0797	< 10	10	749.3	34.3	0.954	1.210	1.256	23.73	1788	45	0.000
4/13/2012	8552939	0.0714	< 10	12	746.3	34.5	0.954	1.214	1.246	23.71	1772	40	0.000
4/16/2012	8552929	0.0290	< 10	14	745.5	34.8	0.953	1.218	1.239	23.75	1765	16	0.000
4/17/2012	8552921	0.0206	< 10	13	751.5	34.7	0.954	1.216	1.252	23.76	1785	12	0.000
4/18/2012	8552911	0.0243	< 10	15	747.7	34.9	0.953	1.219	1.240	23.70	1763	14	0.000
4/19/2012	8552902	0.0565	30	17	742.4	35.2	0.953	1.222	1.224	23.81	1749	32	0.017
4/20/2012	8593292	0.0239	< 10	12	741.6	34.5	0.953	1.213	1.238	23.74	1763	14	0.000
4/23/2012	8593282	0.0365	22	9	745.9	34.2	0.954	1.209	1.252	23.74	1783	20	0.012
4/24/2012	8593273	0.0568	130	15	739.7	35.0	0.953	1.219	1.225	23.82	1751	32	0.074
4/25/2012	8593264	0.0699	29	19	735.7	35.5	0.952	1.225	1.208	23.67	1715	41	0.017
4/26/2012	8593254	0.0767	< 10	22	741.0	35.8	0.952	1.230	1.211	23.70	1722	45	0.000
4/27/2012	8593245	0.0577	< 10	12	744.8	34.6	0.954	1.214	1.243	23.80	1775	33	0.000
4/30/2012	8593236	0.0328	36	20	743.6	35.5	0.952	1.227	1.220	23.85	1746	19	0.020

Data Captured	TSP	Lead
Valid Samples:	21	21
Scheduled Samples:	21	21
Percent Data Captured:	100%	100%

Monthly Average:	29	0.009
Standard Deviation:	11	0.017
Maximum:	47	0.074
Minimum:	12	0.000

NOTES

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celsius

P_{av} = average station pressure in millimeters of mercury

P_i = (((Temp in °Kelvin * Temp Slope) + Temp Int.)) * 1.868

P_i = ((Temp in °Kelvin * 0.0664) + (-0.4213)) * 1.868

P_i/P_a = pressure ratio of P_i and P_{av} = 1 - P/P_{av}

Q_a = look up table volumetric flow rate

Q_{std} = total sample volumetric flow rate corrected to standard conditions

V_{std} = total sample volume corrected to standard conditions

TSP = mass concentration in µg/std m³

Lead = mass concentration in µg/std m³



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P4475

Elvins Rivermines Site #3 WTP

Sample Date 2012	Filter ID	TSP Filter Net Wt. g	Lead Total Wt. µg	T _{av} C	P _{av} mmHg	P _f mmHg	Ratio P _f /P _a	Q _a m ³ /min	Q _{std} m ³ /min	Elapsed Time hr	Sample Volume V _{std} m ³	Mass Concentrations TSP µg/m ³ Lead µg/m ³	
4/2/2012	8552223	0.1069	28	24	738.0	36.1	0.951	1.231	1.197	23.52	1690	63	0.017
4/3/2012	8552214	0.0530	11	20	740.5	35.6	0.952	1.224	1.213	23.75	1728	31	0.007
4/4/2012	8552204	0.0546	17	17	738.4	35.1	0.952	1.218	1.217	23.68	1730	32	0.010
4/5/2012	8552995	0.0427	11	11	740.6	34.5	0.953	1.210	1.234	23.81	1763	24	0.006
4/6/2012	8552986	0.0384	< 10	9	748.1	34.2	0.954	1.206	1.254	23.80	1791	21	0.000
4/9/2012	8552975	0.0410	20	13	747.6	34.7	0.954	1.213	1.242	23.50	1751	23	0.011
4/10/2012	8552966	0.0589	69	11	747.9	34.4	0.954	1.209	1.249	23.76	1781	33	0.039
4/11/2012	8552957	0.0600	29	7	750.5	34.0	0.955	1.203	1.263	23.72	1798	33	0.016
4/12/2012	8552947	0.0770	23	10	749.3	34.3	0.954	1.208	1.254	23.74	1786	43	0.013
4/13/2012	8552938	0.0778	< 10	12	746.3	34.5	0.954	1.211	1.243	23.77	1773	44	0.000
4/16/2012	8552928	0.0405	84	14	745.5	34.8	0.953	1.215	1.236	23.79	1764	23	0.048
4/17/2012	8552920	0.0252	10	13	751.5	34.7	0.954	1.213	1.250	23.75	1781	14	0.006
4/18/2012	8552910	0.0305	14	15	747.7	34.9	0.953	1.216	1.237	23.68	1758	17	0.008
4/19/2012	8552901	0.0600	15	17	742.4	35.2	0.953	1.220	1.222	23.72	1739	35	0.009
4/20/2012	8593291	0.0236	< 10	12	741.6	34.5	0.953	1.211	1.235	23.76	1761	13	0.000
4/23/2012	8593281	0.0351	32	9	745.9	34.2	0.954	1.207	1.249	23.80	1783	20	0.018
4/24/2012	8593272	0.0708	80	15	739.7	35.0	0.953	1.216	1.222	23.75	1742	41	0.046
4/25/2012	8593263	0.0748	16	19	735.7	35.5	0.952	1.223	1.206	23.56	1705	44	0.009
4/26/2012	8593253	0.1633	70	22	741.0	35.8	0.952	1.227	1.209	23.65	1715	95	0.041
4/27/2012	8593244	0.0576	29	12	744.8	34.6	0.954	1.211	1.240	23.77	1769	33	0.017
4/30/2012	8593235	0.0332	18	20	743.6	35.5	0.952	1.225	1.218	23.78	1738	19	0.011

Data Captured	TSP	Lead
Valid Samples:	21	21
Scheduled Samples:	21	21
Percent Data Captured:	100%	100%

Monthly Average:	33	0.016
Standard Deviation:	19	0.015
Maximum:	95	0.048
Minimum:	13	0.000

NOTES

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celcius
 P_{av} = average station pressure in millimeters of mercury
 P_f = (((Temp in °Kelvin * Temp Slope) + Temp Int.)) * 1.868
 P_f = ((Temp in °Kelvin * 0.0664) + (-0.4213)) * 1.868
 P_f/P_a = pressure ratio of P_f and P_{av} = 1 - P_f/P_{av}
 Q_a = look up table volumetric flow rate
 Q_{std} = total sample volumetric flow rate corrected to standard conditions
 V_{std} = total sample volume corrected to standard conditions
 TSP = mass concentration in µg/std m³
 Lead = mass concentration in µg/std m³



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P6609

Big River Site #4 - QA

Sample Date 2012	Filter ID	TSP Filter Net Wt. g	Lead Total Wt. µg	T _{av} C	P _{av} mmHg	P _f mmHg	Ratio P _f /P _{av}	Q _s m ³ /min	Q _{std} m ³ /min	Elapsed Time hr	Sample Volume V _{std} m ³	Mass Concentrations TSP µg/m ³	Lead µg/m ³
4/3/2012	8552226	0.0539	11	20	740.5	35.6	0.952	1.229	1.217	23.67	1729	31	0.007
4/5/2012	8552998	0.0625	16	11	740.6	34.5	0.953	1.214	1.239	23.88	1775	35	0.009
4/10/2012	8552978	0.0696	63	11	747.9	34.4	0.954	1.214	1.254	23.93	1801	39	0.035
4/12/2012	8552950	0.0895	14	10	749.3	34.3	0.954	1.213	1.259	23.75	1794	50	0.008
4/17/2012	8552931	0.0304	17	13	751.5	34.7	0.954	1.218	1.254	23.88	1797	17	0.010
4/19/2012	8552904	0.0627	37	17	742.4	35.2	0.953	1.225	1.227	23.65	1741	36	0.021
4/24/2012	8593284	0.0642	34	15	739.7	35.0	0.953	1.221	1.227	23.83	1755	37	0.019
4/26/2012	8593256	0.0954	34	22	741.0	35.8	0.952	1.232	1.214	23.38	1702	56	0.020

Valid Samples:	8	8
Scheduled Samples:	8	8
Percent Data Captured:	100%	100%

Monthly Average:	38	0.016
Standard Deviation:	12	0.010
Maximum:	56	0.035
Minimum:	17	0.007

NOTES

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celsius
P_{av} = average station pressure in millimeters of mercury
P_f = (((Temp in °Kelvin * Temp Slope))+Temp Int.)*1.868
P_i = ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868
P_f/P_{av} = pressure ratio of P_f and P_{av} = 1 - P_f/P_{av}

Q_s = look up table volumetric flow rate
Q_{std} = total sample volumetric flow rate corrected to standard conditions
V_{std} = total sample volume corrected to standard conditions
TSP = mass concentration in µg/std m³
Lead = mass concentration in µg/std m³

Lab Results (Lead and Cadmium)



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ANALYSIS REPORT

Client Information:
 Barr Engineering Company
 7390 Ohms Lane
 Edina, MN 55439-2330

Chain of Custody No.: 12-0356
Date Received: 04/19/12
Analysis Method: 40 CFR §50
 Appendix G

Location **Elvins River
 Mines**

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
121941	8552222	04/02/12	#1 South - Office	24	< 10	05/09/12 - DS
121942	8552224	04/02/12	#2 North - W&B	20	< 10	05/09/12 - DS
121943	8552223	04/02/12	#3 East - WTP	28	< 10	05/09/12 - DS
121944	8552213	04/03/12	#1 South - Office	12	< 10	05/09/12 - DS
121945	8552215	04/03/12	#2 North - W&B	35	< 10	05/09/12 - DS
121946	8552214	04/03/12	#3 East - WTP	11	< 10	05/09/12 - DS
121947	8552203	04/04/12	#1 South - Office	44	< 10	05/09/12 - DS
121948	8552205	04/04/12	#2 North - W&B	14	< 10	05/09/12 - DS
121949	8552204	04/04/12	#3 East - WTP	17	< 10	05/09/12 - DS
121950	8552994	04/05/12	#1 South - Office	143	< 10	05/09/12 - DS
121951	8552996	04/05/12	#2 North - W&B	< 10	< 10	05/09/12 - DS
121952	8552995	04/05/12	#3 East - WTP	11	< 10	05/09/12 - DS
121953	8552985	04/06/12	#1 South - Office	16	< 10	05/09/12 - DS
121954	8552987	04/06/12	#2 North - W&B	< 10	< 10	05/08/12 - DS
121955	8552986	04/06/12	#3 East - WTP	< 10	< 10	05/08/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
 7390 Ohms Lane
 Edina, MN 55439-2330

Chain of Custody No.: 12-0399
Date Received: 05/02/12
Analysis Method: 40 CFR §50
 Appendix G

Location Elvins River
 Mines

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122094	8552974	04/09/12	#1 South - Office	503	< 10	05/10/12 - DS
122095	8552976	04/09/12	#2 North - W&B	< 10	< 10	05/10/12 - DS
122096	8552975	04/09/12	#3 East - WTP	20	< 10	05/10/12 - DS
122097	8552965	04/10/12	#1 South - Office	514	< 10	05/10/12 - DS
122098	8552967	04/10/12	#2 North - W&B	< 10	< 10	05/10/12 - DS
122099	8552966	04/10/12	#3 East - WTP	69	< 10	05/10/12 - DS
122100	8552956	04/11/12	#1 South - Office	261	< 10	05/10/12 - DS
122101	8552958	04/11/12	#2 North - W&B	16	< 10	05/10/12 - DS
122102	8552957	04/11/12	#3 East - WTP	29	< 10	05/10/12 - DS
122103	8552946	04/12/12	#1 South - Office	15	< 10	05/10/12 - DS
122104	8552948	04/12/12	#2 North - W&B	< 10	< 10	05/10/12 - DS
122105	8552947	04/12/12	#3 East - WTP	23	< 10	05/10/12 - DS
122106	8552937	04/13/12	#1 South - Office	< 10	< 10	05/10/12 - DS
122107	8552939	04/13/12	#2 North - W&B	< 10	< 10	05/10/12 - DS
122108	8552938	04/13/12	#3 East - WTP	< 10	< 10	05/10/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0400
Date Received: 05/02/12
Analysis Method: 40 CFR §50
Appendix G

Location **Elvins River
Mines**

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122141	8552927	04/16/12	#1 South - Office	317	< 10	05/15/12 - DS
122142	8552929	04/16/12	#2 North - W&B	< 10	< 10	05/15/12 - DS
122143	8552928	04/16/12	#3 East - WTP	84	< 10	05/15/12 - DS
122144	8552919	04/17/12	#1 South - Office	35	< 10	05/15/12 - DS
122145	8552921	04/17/12	#2 North - W&B	< 10	< 10	05/15/12 - DS
122146	8552920	04/17/12	#3 East - WTP	10	< 10	05/15/12 - DS
122147	8552909	04/18/12	#1 South - Office	34	< 10	05/15/12 - DS
122148	8552911	04/18/12	#2 North - W&B	< 10	< 10	05/15/12 - DS
122149	8552910	04/18/12	#3 East - WTP	14	< 10	05/15/12 - DS
122150	8593300	04/19/12	#1 South - Office	14	< 10	05/15/12 - DS
122151	8552902	04/19/12	#2 North - W&B	30	< 10	05/15/12 - DS
122152	8552901	04/19/12	#3 East - WTP	15	< 10	05/15/12 - DS
122153	8593290	04/20/12	#1 South - Office	< 10	< 10	05/15/12 - DS
122154	8593292	04/20/12	#2 North - W&B	< 10	< 10	05/15/12 - DS
122155	8593291	04/20/12	#3 East - WTP	< 10	< 10	05/15/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
 7390 Ohms Lane
 Edina, MN 55439-2330

Chain of Custody No.: 12-0430
Date Received: 05/09/12
Analysis Method: 40 CFR §50
 Appendix G

Location Elvins River
 Mines

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122312	8593280	04/23/12	#1 South - Office	316	< 10	05/18/12 - DS
122313	8593282	04/23/12	#2 North - W&B	22	< 10	05/18/12 - DS
122314	8593281	04/23/12	#3 East - WTP	32	< 10	05/18/12 - DS
122315	8593271	04/24/12	#1 South - Office	62	< 10	05/18/12 - DS
122316	8593273	04/24/12	#2 North - W&B	130	< 10	05/18/12 - DS
122317	8593272	04/24/12	#3 East - WTP	80	< 10	05/18/12 - DS
122318	8593262	04/25/12	#1 South - Office	193	< 10	05/18/12 - DS
122319	8593264	04/25/12	#2 North - W&B	29	< 10	05/18/12 - DS
122320	8593263	04/25/12	#3 East - WTP	16	< 10	05/18/12 - DS
122321	8593252	04/26/12	#1 South - Office	603	< 10	05/18/12 - DS
122322	8593254	04/26/12	#2 North - W&B	< 10	< 10	05/18/12 - DS
122323	8593253	04/26/12	#3 East - WTP	70	< 10	05/18/12 - DS
122324	8593243	04/27/12	#1 South - Office	20	< 10	05/18/12 - DS
122325	8593245	04/27/12	#2 North - W&B	< 10	< 10	05/18/12 - DS
122326	8593244	04/27/12	#3 East - WTP	29	< 10	05/18/12 - DS
122327	8593234	04/30/12	#1 South - Office	10	< 10	05/18/12 - DS
122328	8593236	04/30/12	#2 North - W&B	36	< 10	05/18/12 - DS
122329	8593235	04/30/12	#3 East - WTP	18	< 10	05/18/12 - DS

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ANALYSIS REPORT

Client Information:
 Barr Engineering Company
 7390 Ohms Lane
 Edina, MN 55439-2330

Chain of Custody No.: 12-0356
 Date Received: 04/19/12
 Analysis Method: 40 CFR §50
 Appendix G

Location Big River

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
121934	8552225	04/02/12	#4 Primary	70	< 10	05/09/12 - DS
121935	8552216	04/03/12	#4 Primary	11	< 10	05/09/12 - DS
121936	8552226	04/03/12	#4 QA	11	< 10	05/09/12 - DS
121937	8552206	04/04/12	#4 Primary	21	< 10	05/09/12 - DS
121938	8552997	04/05/12	#4 Primary	17	< 10	05/09/12 - DS
121939	8552998	04/05/12	#4 QA	16	< 10	05/09/12 - DS
121940	8552988	04/06/12	#4 Primary	11	< 10	05/09/12 - DS

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ANALYSIS REPORT

Client Information:
Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0399
Date Received: 05/02/12
Analysis Method: 40 CFR §50
Appendix G

Location **Big River**

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122087	8552977	04/09/12	#4 Primary	58	< 10	05/10/12 - DS
122088	8552968	04/10/12	#4 Primary	68	< 10	05/10/12 - DS
122089	8552978	04/10/12	#4 QA	63	< 10	05/10/12 - DS
122090	8552959	04/11/12	#4 Primary	52	< 10	05/10/12 - DS
122091	8552949	04/12/12	#4 Primary	14	< 10	05/10/12 - DS
122092	8552950	04/12/12	#4 QA	14	< 10	05/10/12 - DS
122093	8552940	04/13/12	#4 Primary	< 10	< 10	05/10/12 - DS

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ANALYSIS REPORT

Client Information:
 Barr Engineering Company
 7390 Ohms Lane
 Edina, MN 55439-2330

Chain of Custody No.: 12-0400
Date Received: 05/02/12
Analysis Method: 40 CFR §50
 Appendix G

Location **Big River**

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122134	8552930	04/16/12	#4 Primary	13	< 10	05/15/12 - DS
122135	8552922	04/17/12	#4 Primary	18	< 10	05/15/12 - DS
122136	8552931	04/17/12	#4 QA	17	< 10	05/15/12 - DS
122137	8552912	04/18/12	#4 Primary	15	< 10	05/15/12 - DS
122138	8552903	04/19/12	#4 Primary	34	< 10	05/15/12 - DS
122139	8552904	04/19/12	#4 QA	37	< 10	05/15/12 - DS
122140	8593293	04/20/12	#4 Primary	< 10	< 10	05/15/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0430
Date Received: 05/09/12
Analysis Method: 40 CFR §50
Appendix G
Location: Big River

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122304	8593283	04/23/12	#4 Primary	43	< 10	05/18/12 - DS
122305	8593274	04/24/12	#4 Primary	30	< 10	05/18/12 - DS
122306	8593284	04/24/12	#4 QA	34	< 10	05/18/12 - DS
122307	8593265	04/25/12	#4 Primary	28	< 10	05/18/12 - DS
122308	8593255	04/26/12	#4 Primary	34	< 10	05/18/12 - DS
122309	8593256	04/26/12	#4 QA	34	< 10	05/18/12 - DS
122310	8593246	04/27/12	#4 Primary	21	< 10	05/18/12 - DS
122311	8593237	04/30/12	#4 Primary	21	< 10	05/18/12 - DS

Submitted by: _____

5/21/12

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Meteorological Data

Meteorological Report

The Doe Run Company

Wind Speed

Site Name: Rivermines

Average Interval: 01 Hour

Units: mph

Sampling Frequency: 01 Second

2012 Day	Hour																								24 Hour Avg	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	Avg
1-Apr	0.6	3.9	0.8	0.2	0.4	0.5	0.9	0.9	2.5	5.2	7.3	9.2	8.7	9.1	6.5	7.6	6.7	5.1	5.2	6.1	8.7	6.7	5.9	5.8	9.2	4.8
2-Apr	5.5	3.6	1.6	2.3	0.1	0.0	0.3	0.4	2.1	1.9	2.4	4.3	5.2	6.1	5.7	6.2	6.0	5.3	4.1	5.7	6.2	5.3	3.0	1.4	6.2	3.5
3-Apr	0.1	0.3	0.5	0.8	2.5	0.3	0.2	0.5	2.9	5.0	5.0	5.2	6.2	7.6	7.3	5.6	4.9	2.5	3.7	0.9	1.3	0.5	1.3	1.9	7.6	2.8
4-Apr	1.2	0.0	0.1	0.8	0.7	0.3	0.9	1.9	1.4	2.2	2.8	3.7	4.9	3.8	3.5	4.1	3.0	4.5	6.8	4.2	2.6	2.6	0.0	0.1	6.8	2.3
5-Apr	0.0	0.6	0.1	2.1	5.8	4.5	2.8	1.3	4.9	5.5	4.8	4.0	5.3	6.3	7.5	6.8	5.2	4.1	1.7	0.1	0.0	0.0	0.2	0.2	7.5	3.1
6-Apr	0.7	0.4	1.4	1.3	1.8	0.7	1.0	3.7	4.8	5.7	5.5	5.1	5.2	4.7	4.7	4.6	4.2	3.4	1.6	0.2	0.1	0.0	0.2	0.1	5.7	2.5
7-Apr	0.1	0.1	0.1	0.0	0.2	0.0	0.2	3.2	4.2	3.9	2.3	2.8	2.3	1.8	1.7	2.1	3.0	1.1	0.2	0.3	0.2	0.2	3.5	7.0	7.0	1.7
8-Apr	4.0	4.0	6.0	6.9	4.8	3.1	0.3	3.4	4.4	6.4	4.2	4.8	4.0	3.3	2.6	2.0	1.5	0.7	0.1	0.1	0.2	0.4	0.1	1.5	6.9	2.9
9-Apr	2.8	3.1	2.7	3.2	1.9	0.8	1.0	4.3	7.1	5.9	6.4	6.9	6.0	6.0	5.6	4.6	7.2	4.7	1.5	0.1	0.4	0.1	0.1	0.1	7.2	3.4
10-Apr	0.1	0.1	0.3	0.0	0.1	0.2	3.7	7.1	6.5	6.3	8.6	7.2	7.0	7.8	8.3	7.4	7.4	6.5	4.8	0.7	0.1	0.1	0.3	1.0	8.6	3.8
11-Apr	1.7	0.3	0.4	0.4	0.2	0.1	0.6	4.1	4.3	4.8	4.1	3.3	4.5	5.7	5.6	5.5	4.5	3.9	1.0	0.3	0.0	0.1	0.1	0.3	5.7	2.3
12-Apr	0.0	0.1	0.1	0.4	0.5	0.7	0.1	0.3	3.9	7.1	6.1	5.2	5.1	4.3	4.8	2.5	4.1	2.6	3.0	3.2	2.7	1.0	0.7	1.5	7.1	2.5
13-Apr	1.9	3.6	4.8	3.2	5.0	4.5	5.1	7.4	5.1	3.4	3.1	2.7	4.5	4.7	5.6	6.4	4.5	3.3	4.4	4.9	6.7	6.0	4.6	4.1	7.4	4.6
14-Apr	2.3	1.3	1.9	1.3	0.5	4.6	5.8	2.8	2.2	2.6	2.1	6.3	10.9	11.0	7.4	8.6	8.3	9.2	8.1	7.6	4.7	5.1	6.1	6.0	11.0	5.3
15-Apr	6.9	9.0	9.8	11.5	10.3	9.9	9.2	11.1	11.8	13.8	13.5	11.4	11.4	13.0	11.3	10.2	8.6	9.4	12.4	8.3	4.9	8.7	8.3	4.6	13.8	10.0
16-Apr	4.0	8.0	8.9	10.2	9.8	8.5	6.3	6.9	5.7	7.1	5.5	6.0	5.4	5.6	4.5	4.9	4.4	4.2	1.4	0.1	0.1	0.3	0.1	0.3	10.2	4.9
17-Apr	1.4	0.5	1.5	2.2	2.4	2.4	1.6	0.3	2.1	2.3	3.9	4.5	4.3	4.7	3.9	4.0	3.7	3.5	2.6	2.7	3.1	1.5	0.3	0.1	4.7	2.5
18-Apr	0.2	0.1	0.1	0.1	0.0	0.7	0.8	0.6	3.5	5.5	5.5	5.0	5.4	4.4	4.6	3.6	4.3	4.4	4.8	5.5	5.4	5.3	4.7	4.6	5.5	3.3
19-Apr	3.4	0.9	0.1	0.1	0.0	0.2	0.6	2.3	4.0	7.4	7.1	7.3	7.7	7.7	8.6	9.3	8.7	8.6	6.0	4.1	3.3	5.0	3.1	0.6	9.3	4.4
20-Apr	1.8	4.5	6.1	6.4	4.1	3.2	0.5	1.9	6.0	7.7	7.2	6.8	7.0	7.6	8.1	7.3	6.2	6.4	7.1	7.3	6.2	4.7	4.6	5.2	8.1	5.6
21-Apr	6.4	6.2	5.4	5.0	4.1	3.1	3.7	7.7	7.6	8.5	7.1	6.5	5.5	5.2	5.5	4.5	6.1	4.3	2.0	0.2	0.1	0.5	1.1	0.2	8.5	4.4
22-Apr	0.3	1.5	3.3	2.2	2.3	1.9	0.3	4.0	3.0	2.5	6.7	8.9	10.1	9.4	9.8	9.6	9.6	8.2	6.3	5.5	5.5	6.0	4.3	0.5	10.1	5.1
23-Apr	0.0	0.1	0.2	1.1	1.1	0.7	1.6	6.4	8.5	9.1	9.4	9.3	8.7	9.2	9.7	8.1	7.7	5.9	4.1	1.3	0.3	1.7	0.7	0.7	9.7	4.4
24-Apr	1.1	0.2	1.3	0.6	0.1	1.5	2.2	2.1	3.4	4.5	5.5	6.5	8.5	8.4	7.2	6.7	7.7	6.4	3.8	0.5	0.7	1.4	2.4	1.2	8.5	3.5
25-Apr	0.7	0.7	0.9	0.0	0.0	0.2	0.7	1.0	2.4	4.3	4.0	7.5	9.0	9.3	9.2	8.4	5.9	4.1	3.1	0.8	1.1	0.8	1.0	2.7	9.3	3.2
26-Apr	2.6	4.1	2.1	2.0	1.8	1.4	1.8	3.8	4.8	7.2	7.1	6.7	7.8	7.2	8.1	7.3	6.4	5.3	3.9	1.6	0.5	0.4	3.3	2.7	8.1	4.2
27-Apr	2.2	3.7	5.2	4.7	3.8	3.8	4.4	5.8	6.4	5.8	5.6	7.3	6.5	4.1	5.5	7.5	5.9	6.1	2.5	2.8	3.2	2.3	3.8	2.0	7.5	4.6
28-Apr	3.5	1.9	3.6	0.9	0.3	0.4	3.6	6.0	6.8	6.9	6.7	5.5	4.3	5.9	7.2	7.4	6.3	3.8	1.6	3.1	3.8	1.8	2.1	1.8	7.4	4.0
29-Apr	0.6	0.3	1.5	2.3	1.9	2.2	2.4	2.9	4.1	3.6	3.3	3.5	3.0	3.8	3.7	4.3	3.2	2.4	1.5	0.5	0.4	0.6	0.0	0.6	4.3	2.2
30-Apr	1.2	3.7	5.9	6.2	4.5	2.0	2.0	3.1	4.1	3.4	2.6	3.5	2.5	2.9	3.8	3.7	2.9	1.9	0.6	0.4	0.2	0.0	0.2	0.5	6.2	2.6
																								Maximum Hour/Monthly Average	13.8	3.8
																								Total Hours in Month	720	
																								Valid Hours/Percent Data Captured	720	100.0%



Meteorological Report

The Doe Run Company

Wind Direction

Site Name: Rivermines

Average Interval: 01 Hour

Units: Degrees

Sampling Frequency: 01 Second

2012	Hour																								24 Hour Avg
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Apr	216	187	219	194	265	267	257	267	244	235	231	225	228	227	232	219	224	209	194	184	191	193	199	203	221
2-Apr	206	207	197	198	174	187	7	102	137	220	106	99	82	91	114	103	110	145	155	171	183	188	202	216	150
3-Apr	180	157	159	236	210	10	211	238	202	202	208	217	175	191	202	201	198	355	320	81	67	219	225	194	194
4-Apr	198	176	17	181	187	335	349	10	50	29	55	0	354	19	66	24	41	13	332	344	314	304	219	196	159
5-Apr	209	237	210	4	27	8	3	41	14	344	353	16	8	10	359	1	357	340	352	350	281	158	156	5	160
6-Apr	17	11	15	18	33	355	339	23	54	39	35	42	46	48	31	48	59	54	64	140	177	182	177	169	91
7-Apr	188	197	183	187	339	219	360	163	163	149	196	116	72	205	236	239	216	197	184	210	233	218	300	320	212
8-Apr	319	315	323	322	339	335	320	357	26	35	32	16	40	85	27	121	125	141	123	171	226	194	206	219	184
9-Apr	232	236	240	239	240	231	244	290	329	359	354	353	326	326	315	285	315	316	318	219	186	166	178	203	271
10-Apr	192	181	286	201	238	270	358	358	354	338	346	341	325	333	330	321	336	345	337	324	196	188	200	231	289
11-Apr	236	209	249	310	335	291	315	354	16	33	7	336	3	8	360	15	30	39	52	73	100	161	186	202	163
12-Apr	164	349	179	231	221	212	224	3	161	191	174	129	153	154	178	146	195	176	164	164	161	165	158	133	174
13-Apr	155	148	154	164	154	151	148	151	152	158	136	85	25	44	119	145	144	147	160	154	157	164	167	158	139
14-Apr	142	350	47	95	116	172	185	335	336	145	192	194	203	209	203	200	195	192	193	191	183	181	181	180	192
15-Apr	188	189	192	193	199	192	202	192	194	190	192	186	180	184	178	177	178	170	199	239	238	219	198	216	195
16-Apr	208	209	217	217	216	231	247	254	267	281	279	287	290	295	293	306	305	319	321	174	165	188	222	204	250
17-Apr	193	187	227	219	220	209	231	238	11	30	41	55	71	105	88	82	86	96	119	149	154	162	241	172	141
18-Apr	157	169	173	159	339	224	187	105	149	179	165	157	161	222	209	216	203	186	172	179	181	187	192	187	186
19-Apr	169	170	144	239	358	13	355	32	170	202	190	170	169	174	166	170	175	188	184	190	186	173	174	193	181
20-Apr	221	213	209	219	232	239	256	271	316	327	331	322	328	331	334	334	340	338	332	336	344	323	328	342	299
21-Apr	356	358	356	354	358	4	4	1	5	7	17	5	357	345	2	356	339	352	12	188	189	198	187	203	190
22-Apr	191	12	161	223	48	52	202	188	284	338	353	354	346	326	334	343	343	341	347	333	319	324	337	324	268
23-Apr	187	186	227	237	227	230	265	332	337	338	336	329	331	325	318	315	309	327	320	305	227	234	244	247	280
24-Apr	253	257	244	252	243	225	238	256	252	243	237	236	222	223	228	217	210	206	204	190	177	201	219	227	227
25-Apr	228	223	251	175	210	20	188	348	176	182	210	184	186	188	200	193	184	173	175	17	185	230	216	225	190
26-Apr	248	242	253	231	206	254	266	319	337	348	336	342	346	342	342	344	348	352	355	6	44	173	49	53	256
27-Apr	53	61	64	78	73	63	64	92	83	75	79	78	72	46	83	115	108	109	88	89	88	57	121	117	82
28-Apr	174	173	134	110	2	164	177	193	199	203	198	199	201	174	174	174	182	177	161	16	28	37	44	57	140
29-Apr	19	75	26	55	48	80	90	67	22	52	84	85	50	33	61	27	27	23	23	42	151	316	176	176	75
30-Apr	67	164	174	201	211	231	235	213	212	236	230	198	259	279	257	291	263	269	199	175	147	59	180	167	205
																								Total Hours in Month	720
																								Valid Hours	720
																								Percent Data Captured	100.0%



Meteorological Report

The Doe Run Company

Σ0

Site Name: Rivermines

Average Interval: 01 Hour

Units: Degrees

2012	Hour																								24 Hour Avg
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Apr	14.7	17.6	10.4	5.5	8.6	5.1	8.0	18.5	30.0	25.4	28.0	23.8	26.6	22.5	25.9	24.3	22.4	15.4	11.0	14.1	15.6	15.2	14.7	15.0	17
2-Apr	15.3	13.5	10.3	15.7	2.1	3.8	2.1	9.4	30.1	40.8	45.7	33.3	28.8	27.8	33.8	27.2	23.3	23.0	18.1	18.0	14.6	14.8	13.7	13.7	20
3-Apr	2.3	7.1	9.0	8.0	15.7	9.9	2.4	27.7	23.1	23.7	22.2	33.1	25.8	23.7	24.9	19.4	21.1	26.9	27.5	20.1	24.3	43.6	12.3	14.7	20
4-Apr	12.3	1.0	1.8	8.4	8.2	34.7	15.0	28.3	26.3	23.1	30.0	19.1	18.3	28.4	32.2	21.5	27.4	18.5	26.1	24.4	46.1	27.9	6.5	6.7	20
5-Apr	4.7	10.1	9.9	20.2	20.4	19.4	16.6	16.6	18.7	20.2	19.0	18.5	17.7	19.1	18.2	17.4	17.3	16.1	11.4	8.1	5.4	1.1	12.5	12.1	15
6-Apr	19.0	9.8	21.7	15.0	19.7	18.8	13.1	22.9	31.8	29.7	30.8	31.2	34.8	33.5	31.2	31.9	33.9	28.0	18.2	5.5	3.1	0.6	6.5	6.6	21
7-Apr	0.9	3.3	7.1	2.1	2.5	12.1	10.8	23.3	28.1	33.1	39.7	55.0	61.7	52.4	33.5	32.0	22.7	9.8	2.6	11.2	6.1	9.4	18.6	19.0	21
8-Apr	19.8	20.5	15.3	14.2	14.0	13.3	11.6	19.7	29.5	29.1	43.2	33.3	48.6	62.8	38.3	46.0	33.9	26.6	5.1	1.1	6.5	13.7	3.4	18.4	24
9-Apr	17.2	13.5	12.1	11.9	15.1	16.2	11.6	20.8	19.1	22.3	24.5	31.1	36.5	31.9	36.6	36.4	21.6	18.2	10.0	4.7	9.1	1.9	1.6	0.6	18
10-Apr	3.1	4.1	17.0	1.0	11.9	11.2	14.9	18.9	21.8	25.1	22.5	28.6	28.1	27.3	25.9	24.3	19.7	18.6	15.3	5.5	3.8	5.3	4.4	12.1	15
11-Apr	16.0	7.1	20.9	19.7	12.6	16.6	15.9	21.2	24.7	31.4	40.8	52.9	37.9	31.1	36.3	30.5	29.0	25.1	17.5	8.4	3.7	5.7	3.9	6.5	21
12-Apr	0.7	3.3	2.7	7.5	11.3	9.6	8.6	14.6	28.6	27.0	33.8	37.2	41.2	42.0	34.8	54.1	29.8	16.6	16.6	17.8	16.4	13.5	14.2	21.5	21
13-Apr	17.8	21.2	22.1	23.6	21.4	23.8	24.0	24.1	23.6	21.5	27.9	26.9	27.1	30.5	28.1	23.0	30.5	26.9	23.6	23.5	21.5	22.2	22.2	24.0	24
14-Apr	29.6	17.5	21.8	19.9	18.7	23.8	27.3	27.6	26.3	28.5	20.7	18.2	20.0	20.5	21.4	21.6	18.8	18.1	17.5	17.4	17.5	19.4	19.6	20.3	21
15-Apr	18.3	17.7	18.7	19.0	20.0	20.2	20.1	21.4	19.2	21.0	20.9	21.6	23.1	21.1	21.8	23.3	22.7	22.8	22.7	24.0	24.3	21.2	20.1	32.2	22
16-Apr	30.0	19.4	20.3	20.2	19.3	22.8	27.1	26.9	34.0	35.8	35.8	35.3	37.4	37.4	36.1	37.1	29.8	21.9	10.3	1.5	2.4	6.9	9.0	7.2	23
17-Apr	7.8	10.2	17.0	19.7	18.6	16.3	19.7	24.4	24.0	38.9	47.4	33.6	40.8	37.4	47.9	41.1	37.5	26.9	21.2	17.7	16.3	22.0	23.5	5.3	26
18-Apr	3.8	2.8	4.4	5.7	1.3	15.1	19.6	17.7	29.1	28.0	32.7	42.1	35.9	35.6	39.3	33.9	27.5	21.1	19.4	17.5	18.4	16.7	14.4	15.5	21
19-Apr	16.4	8.0	14.2	24.5	0.2	4.9	5.7	23.3	27.8	24.8	27.9	27.3	30.0	29.7	27.1	25.3	24.3	19.2	19.1	14.2	15.3	17.3	43.9	10.4	20
20-Apr	25.3	21.7	20.2	20.8	24.1	17.7	8.3	20.7	25.0	19.1	20.2	21.9	20.8	20.9	19.2	20.3	21.1	18.7	18.8	18.8	17.9	17.7	18.0	17.5	20
21-Apr	17.4	17.1	18.2	19.1	17.3	17.9	17.2	18.5	21.4	21.1	27.4	28.7	39.2	47.9	33.1	36.1	22.9	18.5	17.7	5.7	2.4	26.0	13.0	8.8	21
22-Apr	11.6	52.3	37.2	17.4	28.4	55.5	11.8	21.3	32.6	37.0	17.8	19.0	21.3	22.4	20.0	21.3	19.6	18.8	17.4	16.3	15.5	15.4	16.2	26.3	24
23-Apr	1.3	0.7	4.7	15.3	17.2	19.7	24.7	19.9	20.0	22.4	24.3	24.5	28.3	27.9	26.7	27.1	30.4	22.4	17.0	14.2	4.9	13.9	8.6	5.5	18
24-Apr	7.9	3.3	6.5	5.0	1.5	9.2	18.7	22.6	32.4	26.9	27.5	35.0	24.7	26.4	25.5	23.5	22.0	18.8	15.9	12.5	5.3	9.1	11.1	11.1	17
25-Apr	12.6	7.9	10.3	2.1	0.6	2.1	8.2	13.3	23.6	45.2	48.9	19.4	22.9	23.1	22.8	23.9	25.9	26.6	23.6	19.8	31.3	13.5	10.7	13.0	19
26-Apr	15.7	21.5	24.1	32.3	24.2	16.9	36.4	33.3	24.0	21.8	26.8	25.8	26.3	25.4	21.6	21.6	20.0	17.2	17.7	17.6	14.2	4.7	34.0	31.7	23
27-Apr	28.6	33.0	32.4	29.7	28.3	29.6	29.7	26.1	28.4	32.7	32.7	27.9	29.5	44.9	30.7	26.7	26.8	24.2	47.8	25.6	24.0	25.4	24.1	27.4	30
28-Apr	29.8	39.1	18.9	13.1	7.2	18.3	23.9	22.4	22.6	22.4	22.7	23.5	32.2	26.8	26.8	25.7	21.3	24.9	17.5	33.6	20.8	26.2	23.5	27.2	24
29-Apr	8.8	6.9	19.1	27.2	24.1	23.9	25.9	30.0	24.4	32.8	32.9	33.2	34.2	32.2	28.6	26.9	26.4	25.3	42.0	6.4	11.9	26.1	1.5	10.5	23
30-Apr	25.6	18.7	19.2	19.3	18.9	16.5	39.5	25.0	21.7	26.7	35.5	27.4	37.0	43.5	36.7	37.3	41.6	32.1	14.3	3.2	7.9	0.0	6.9	28.4	24
																					Total Hours in Month			720	
																					Valid Hours			720	
																					Percent Data Captured			100.0%	



Meteorological Report

The Doe Run Company

Temperature

Site Name: Rivermines

Average Interval: 01 Hour
Units: Deg. C
Sampling Frequency: 01 Second

2012 Day	Hour																								24 Hour		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	Avg	
1-Apr	15	18	17	15	14	13	15	20	25	28	29	30	31	32	33	33	33	31	28	27	26	25	24	24	32.8	24.3	
2-Apr	23	22	20	19	17	15	15	20	24	26	28	28	29	30	31	31	31	30	28	26	24	24	22	21	31.4	24.4	
3-Apr	17	16	15	14	16	15	15	17	22	23	24	25	26	26	26	26	25	21	19	19	19	18	18	18	26.3	20.0	
4-Apr	17	16	15	15	15	14	14	16	16	17	18	18	18	18	19	19	19	19	17	16	16	15	14	14	19.4	16.5	
5-Apr	13	13	14	14	12	11	11	12	12	11	11	12	13	13	13	13	13	13	12	10	9	8	7	6	14.1	11.5	
6-Apr	6	4	5	4	4	3	4	6	8	10	11	13	14	15	16	16	15	15	13	9	7	5	4	3	15.7	8.8	
7-Apr	3	2	2	1	1	0	3	10	13	15	18	19	20	21	21	21	20	19	16	13	12	11	12	14	21.4	12.0	
8-Apr	13	13	11	10	9	8	9	11	13	15	16	17	18	18	19	19	19	19	15	10	8	7	7	6	19.4	13.0	
9-Apr	6	5	4	4	4	3	6	12	16	17	19	20	22	22	23	23	22	20	17	14	12	10	9	7	23.1	13.2	
10-Apr	7	8	8	8	6	6	9	10	11	12	13	14	16	17	17	17	16	14	10	7	5	4	4	17.4	10.6		
11-Apr	4	3	2	2	1	1	4	6	8	9	10	12	13	13	14	14	13	13	11	8	5	3	2	1	13.9	7.2	
12-Apr	1	0	0	-1	-1	-1	1	5	11	13	14	15	16	17	18	18	18	17	15	14	13	12	12	12	18.3	9.9	
13-Apr	12	12	12	12	12	12	12	13	12	11	11	11	10	10	10	10	11	12	12	13	13	14	14	14	14.4	11.9	
14-Apr	14	13	12	11	11	15	16	15	14	16	19	22	24	25	26	26	26	25	24	23	22	22	22	22	26.3	19.4	
15-Apr	21	21	20	20	20	20	20	20	21	22	23	23	23	24	24	24	24	24	23	15	14	14	13	12	24.2	20.2	
16-Apr	12	12	13	13	13	12	12	12	13	14	17	18	19	20	21	21	20	19	16	12	10	9	8	7	20.7	14.2	
17-Apr	7	6	6	6	5	5	7	11	14	17	18	19	19	19	19	20	20	19	17	15	13	11	9	8	19.6	12.9	
18-Apr	7	6	6	5	4	4	7	12	16	18	20	21	22	23	24	24	24	22	20	18	16	15	15	14	24.0	15.1	
19-Apr	14	11	9	8	8	8	10	14	19	22	23	24	24	25	25	25	24	23	21	19	17	17	15	15	24.9	17.5	
20-Apr	16	17	18	18	17	16	16	14	13	11	10	10	10	10	10	9	9	9	8	8	8	8	8	8	17.9	11.8	
21-Apr	8	8	7	7	7	7	7	8	9	11	12	13	14	15	16	16	16	15	13	9	8	6	5	5	16.1	10.1	
22-Apr	5	5	6	5	5	5	7	10	12	13	11	11	12	12	12	13	13	12	11	10	9	8	7	4	12.9	9.1	
23-Apr	3	2	2	1	1	1	5	9	11	13	14	15	16	16	17	16	16	15	13	10	8	7	6	6	16.7	9.4	
24-Apr	5	4	4	3	3	3	8	14	18	19	22	23	24	25	26	24	24	24	21	18	15	15	15	13	25.6	15.5	
25-Apr	13	13	12	12	13	13	14	18	20	19	18	22	25	27	28	27	27	26	25	22	20	18	18	18	27.6	19.4	
26-Apr	19	21	20	19	18	18	21	22	23	24	25	27	27	28	27	27	26	24	22	20	18	15	17	16	27.7	21.8	
27-Apr	15	14	13	12	11	10	10	10	11	11	12	13	13	11	10	11	12	13	13	13	13	13	13	12	14.8	12.1	
28-Apr	13	13	13	12	11	12	18	21	23	25	25	26	27	26	26	26	24	24	23	22	20	19	19	19	27.0	20.2	
29-Apr	18	18	17	18	17	17	16	17	17	16	17	18	21	22	23	23	23	23	23	22	20	18	17	16	23.5	18.7	
30-Apr	17	18	20	21	20	19	19	21	23	22	21	21	22	24	23	24	24	23	20	17	16	15	14	14	23.7	19.9	
																								Maximum Hour/Monthly Average		32.8	15.0
																								Total Hours in Month		720	
																								Valid Hours		720	
																								Percent Data Captured		100.0%	

Meteorological Report

The Doe Run Company

Site Pressure

Site Name: Rivermines

Average Interval: 01 Hour
Units: mmHg
Sampling Frequency: 01 Second

2012 Day	Hour																								24 Hour		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	Avg	
1-Apr	739	739	739	738	738	738	739	739	738	738	737	737	736	735	735	734	735	735	735	735	735	736	735	735	739	737	
2-Apr	735	736	736	736	737	737	739	738	739	739	739	739	738	738	737	737	737	738	739	739	740	740	740	740	740	738	
3-Apr	740	739	740	740	741	741	742	742	742	742	741	741	740	740	739	739	739	740	740	740	740	741	740	742	740		
4-Apr	740	739	739	739	739	739	739	739	740	740	739	739	738	738	737	737	737	738	737	738	737	737	737	740	738		
5-Apr	737	738	737	737	738	739	739	739	739	740	740	740	741	741	741	742	742	742	743	744	744	745	745	745	741		
6-Apr	746	746	746	747	747	748	749	749	749	749	749	749	748	748	748	748	748	748	748	749	749	749	749	749	748		
7-Apr	749	749	749	750	750	750	750	750	750	750	750	750	749	749	749	749	748	748	748	749	750	750	751	751	750		
8-Apr	751	751	751	752	753	753	753	753	753	753	753	753	752	751	751	750	750	749	749	749	749	749	749	749	751		
9-Apr	749	749	748	748	748	749	749	749	749	749	749	748	748	747	747	746	746	746	746	746	746	747	747	749	748		
10-Apr	747	747	747	747	748	748	749	749	750	749	749	749	748	748	747	747	747	747	747	747	748	748	748	750	748		
11-Apr	749	749	750	750	750	751	752	751	751	751	752	751	751	750	750	750	750	750	750	750	750	751	751	751	752		
12-Apr	751	751	751	751	751	752	752	752	751	751	750	750	749	748	748	747	747	747	747	747	747	747	748	748	749		
13-Apr	747	747	747	747	747	748	747	747	747	747	747	747	747	747	746	746	745	745	745	745	745	745	745	748	746		
14-Apr	745	745	745	744	743	743	744	743	745	745	744	743	742	742	741	740	740	740	741	741	741	740	740	745	742		
15-Apr	740	739	739	739	740	739	741	740	740	740	740	739	739	738	737	737	736	736	739	739	739	739	739	741	739		
16-Apr	739	739	739	740	741	742	744	743	745	746	746	746	747	747	747	747	748	749	749	750	750	751	751	751	746		
17-Apr	751	751	751	751	752	752	752	752	753	753	753	752	752	752	751	751	751	750	750	751	751	751	751	751	751		
18-Apr	750	750	750	750	750	750	750	751	750	750	749	748	747	747	746	746	746	745	745	745	745	745	745	745	748		
19-Apr	745	745	745	745	745	745	745	746	745	744	744	743	742	742	741	740	739	739	740	740	740	740	739	742	742		
20-Apr	739	738	738	738	738	740	739	741	741	742	742	743	743	743	743	743	743	743	744	744	744	745	745	745	742		
21-Apr	745	745	745	745	745	745	745	745	745	745	744	744	744	744	743	743	743	743	743	744	744	744	744	745	744		
22-Apr	743	743	743	742	742	742	742	743	742	743	743	744	744	744	744	744	745	745	746	746	747	747	747	748	744		
23-Apr	748	747	747	747	748	748	748	748	748	747	747	746	746	745	745	744	744	744	744	744	744	744	744	748	746		
24-Apr	743	743	743	743	743	743	743	743	742	742	741	740	739	738	737	737	736	736	736	737	737	737	737	743	740		
25-Apr	737	737	737	737	737	737	736	737	736	736	736	736	735	734	734	734	734	734	735	735	736	736	736	737	736		
26-Apr	736	737	737	737	738	739	740	740	741	741	742	742	742	742	742	742	742	742	742	743	743	744	745	745	741		
27-Apr	745	745	745	746	746	747	747	747	747	747	747	746	746	746	745	743	743	742	742	742	743	743	743	747	745		
28-Apr	741	741	741	741	741	741	741	741	741	741	742	741	741	741	741	741	741	741	742	743	744	744	744	744	742		
29-Apr	745	744	744	745	745	745	745	745	745	746	746	746	745	745	744	743	743	744	744	744	744	744	744	746	745		
30-Apr	744	744	743	744	744	744	744	744	744	744	743	743	743	743	743	743	743	743	744	744	744	744	744	744	744		
																								Maximum Hour//Monthly Average		753	744
																								Total Hours In Month		720	
																								Valid Hours//Percent Data Captured		720	100.0%

Meteorological Report

The Doe Run Company

Precipitation

Site Name: Rivermines

Average Interval: 01 Hour
Sampling Frequency: 01 Second

2012 Day	Hour																								24 Hour		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	Total	
1-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.47	0.01	0.00	0.00	0.03	0.01	0.47	0.55
4-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.75	0.06	0.07	0.00	0.00	0.01	0.75	0.90	
5-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.00	0.09	0.30	0.04	0.04	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.30	0.53	
14-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.08	
15-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.11	0.18	0.26	0.07	0.02	0.26	0.77	
16-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.09	0.12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.28	
21-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22-Apr	0.00	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.08	
23-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.06	
26-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.08	
28-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30-Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03
																								Maximum Hour//Monthly Total		0.75	3.36
																								Total Hours in Month		720	
																								Valid Hours//Percent Data Captured		720	100.0%